APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,620	12/08/2003	Janaki Krishnaswamy	021756-003100US	4734

51206   7590   05/28/2008
TOWNSEND AND TOWNSEND AND CREW LLP
TWO EMBARCADERO CENTER
8TH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER
PHAM, HUNG Q

ART UNIT	PAPER NUMBER
2168	

MAIL DATE	DELIVERY MODE
05/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 March 2008*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 6-14* is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 6-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

         1.☐ Certified copies of the priority documents have been received.

         2.☐ Certified copies of the priority documents have been received in Application No. _____.

         3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible

for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has

been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37

CFR 1.114. Applicant's submission filed on 03/17/2008 has been entered.

Response to Arguments

Applicant's arguments with respect to the rejection under 35 U.S.C. § 102 have been

considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 14 is rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

Claim 14 directs to a system comprising software per se. Software per se is not one of

the four categories of invention. Software per se is not a series of steps or acts and thus is not a

process. Software per se is not a physical article or object and as such is not a machine or

manufacture. Software per se is not a combination of substances and therefore is not a

composition of matter.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1-3, 6-8, 10 and 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the clause, *the metadata in the database*, references to other items in the claim. It is unclear what item is being referenced.

Regarding claims 2, 3, 6 and 7, the clause, *the validation subject*, references to at least two validation subjects in claim 1. It is unclear which one is being referenced.

Regarding claim 8, as recited at lines 7-8, one or more completeness validation rules is applied to the object instance if a user selects validation. As further recited at lines 9-11, the one or more completeness validation rules is applied to the object instance automatically. It is unclear how the one or more completeness validation rules is applied to the object instance.

Regarding claim 10, the clause, *the object instance*, references to other items in the claim. It is unclear what item is being referenced.

Claim 14 is rejected for at least the reasons as discussed above with respect to claim 8.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Wall et al. [USP 7,028,288 B2] in view of Raghuvir et al. [US 2004/0249823 A1].

Regarding claim 1, Wall teaches a metadata validation system for validating an

object model, the system comprising:

a client device configured to receive user input and provide a user interface to a user (Wall, Col. 4

Lines 23-36);

a database for storing objects corresponding to the object model and metadata describing the object

model (As shown in FIG. 5, the *database* at the location specified by the URL is *for storing objects*,

e.g., Name Object, Address Object, City Object... *corresponding to* the *object model*, e.g., person

model, *and metadata describing the object model*, e.g., Name, Address, City...);

a configuration management module for creating a deployable collection of objects using the object

model (*a deployable collection of objects*, e.g., Name Object, Address Object, City Object…is created

using the person model)

a validation engine for validating the metadata in the database by confirming the metadata complies

with one or more validation rules (Wall, Col. 5 Lines 10-27)

wherein said validation engine is configured

to perform completeness validation on a validation subject in response to a user entered command to

perform validation on the validation subject (Wall, Col. 9 Lines 5-27),

to automatically perform correctness validation on a validation subject when the subject is created or

updated (Wall, Col. 8 Lines 34-60), and

to automatically perform completeness and correctness validation on a validation subject when

requested by the configuration management module (Wall, Col. 8 Lines 34-60 and Col. 9 Lines 5-27).

The missing of Wall is the claimed limitation *the deployable collection represents a tree of objects*

starting at a root object.

Raghuvir teaches *the deployable collection represents a tree of objects starting at a root object* (FIG.

6).

Therefore, it would have been obvious for one of ordinary skill in the art at the time the

invention was made to include the hierarchical collection as taught by Raghuvir into Wall

technique in order to have a representation of the collection.

Regarding claim 2, Wall and Raghuvir, in combination, teach all of the claimed subject

matter as discussed above with respect to claim 1, Wall further discloses *the validation subject is an*

instance of one of an attribute, an association, an object and a collection of objects (Wall, Col. 8 Lines 34-60

and Col. 9 Lines 5-27).

Regarding claim 3, Wall and Raghuvir, in combination, teach all of the claimed subject

matter as discussed above with respect to claim 1, Wall further discloses *the validation subject is a*

meta metadata object selected from the group consisting of a MetaAttribute, a MetaAssociation, a

MetaAssociationEnd, a MetaClass and a MetaCollection (Wall, Col. 8 Lines 34-60 and Col. 9 Lines 5-

27).

Regarding claim 6, Wall and Raghuvir, in combination, teach all of the claimed subject

matter as discussed above with respect to claim 1, Wall further discloses *the validation subject is a*

deployable collection of objects from the database (Wall, Col. 8 Lines 34-60 and Col. 9 Lines 5-27).

Regarding claim 7, Wall and Raghuvir, in combination, teach all of the claimed subject

matter as discussed above with respect to claim 1, wherein *the validation subject is an*

aggregated collection of objects from the database (Wall, Col. 8 Lines 34-60 and Col. 9 Lines 5-27).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

Claims 8-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Wall et al.

[USP 7,028,288 B2].

Regarding claims 8 and 14, Wall teaches a system and computer-implemented method of validating metadata in an object model, the method comprising:

creating an instance of a meta metadata object in response to user input (As shown in FIG. 5, Person is *an instance* of a class derived from the model class (Col. 7 Lines 14-24). The class derived from the model class is considered as being equivalent to *a meta metadata object*);

automatically applying one or more correctness type validation rules to the object instance by confirming the object instance complies with the one or more correctness type validation rules (Wall, Col. 8 Lines 34-60);

if a user selects validation of the object instance, applying one or more completeness validation rules to the object instance (As shown in FIG. 5, when the user select Enter, the completeness validation rules are applied (Col. 9 Lines 5-27)); and

automatically applying both the one or more correctness validation rules and the one or more completeness validation rules to the object instance prior to deployment of the object instance (Col. 8 Lines 34-60 and Col. 9 Lines 5-27).

Regarding claim 9, Wall teaches all of the claimed subject matter as discussed above with respect to claim 8, Wall further discloses *the meta metadata object is one of an attribute, an association, an object and a collection of objects* (Col. 8 Lines 34-60 and Col. 9 Lines 5-27).

Regarding claim 10, Wall teaches all of the claimed subject matter as discussed above with respect to claim 8, Wall further discloses *the meta metadata object is an association and wherein the object instance to which a validation rule is applied includes the two objects associated by the association* (FIG. 5, Col. 8 Lines 34-60 and Col. 9 Lines 5-27).

Regarding claim 11, Wall teaches all of the claimed subject matter as discussed above with respect to claim 8, Wall further discloses the step of *automatically applying the one or more correctness type validation rules to the instance if the instance is automatically updated or manually updated* (FIG. 5, Col. 8 Lines 34-60 and Col. 9 Lines 5-27).

Regarding claim 12, Wall teaches all of the claimed subject matter as discussed above with respect to claim 11, Wall further discloses *the meta metadata object is one of an attribute and an object* (Col. 8 Lines 34-60 and Col. 9 Lines 5-27).

Regarding claim 13, Wall teaches all of the claimed subject matter as discussed above with respect to claim 8, Wall further discloses *the meta metadata object is one of an aggregated collection and a deployable collection* (Col. 8 Lines 34-60 and Col. 9 Lines 5-27).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG Q. PHAM whose telephone number is 571-272-4040. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TIM T. VO can be reached on 571-272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUNG Q PHAM/
Primary Examiner
Art Unit 2168

May 21, 2008